Montana Board of Oil and Gas Conservation
Environmental Assessment

Operator: Fort Worth Operating Company, LLC
Well Name/Number: Clark Farms 29-10
Location: NW SE Section 29 T29N R50E
County: Roosevelt**, MT; Field (or Wildcat)** Wildcat

Air Quality

(possible concerns)
Long drilling time: No, 20-30 days drilling time.
Unusually deep drilling (high horsepower rig): Single derrick rig 1000 HP to drill to 9000' TD, Red River Formation test.
Possible H2S gas production: Yes, possible.
In/near Class I air quality area: Yes, in a Class I air quality area, within Fort Peck Indian Reservation boundaries.
Air quality permit for flaring/venting (if productive): Yes, DEQ air quality permit required under 75-2-211.

Mitigation:
X Air quality permit (AQB review)
___ Gas plants/pipelines available for sour gas
__ Special equipment/procedures requirements
__ Other:_____

Comments: Small single derrick drilling rig, 1000 HP or less should not emit much in the way of pollutants since the rig is mobile and will not be on any location longer than 30 days.
_____

Water Quality

(possible concerns)
Salt/oil based mud: Yes, saltwater mud system to be used out from under surface casing. Freshwater drilling mud system will be used on surface hole.
High water table: None anticipated.
Surface drainage leads to live water: No, closest surface drainage nearby is unnamed ephemeral tributary drainage to Little Badger Creek, about 1/4 of a mile to the east southeast from this location, Little Badger Creek an ephemeral tributary to Badger Creek, about 2 miles to the southeast from this location.
Water well contamination: According to GWIC, no water wells within 1 mile in any direction from this location. Submitted permit indicates domestic water wells within ¼ mile of this location. Surface hole will be drilled with freshwater and steel casing set to 1300' and cemented back to surface. To protect shallow ground waters and the Judith River Formation.
Porous/permeable soils: No, sandy silty clay soils.
Class I stream drainage: No, Class I stream drainages.

Mitigation:
X Lined reserve pit
X Adequate surface casing
__ Berms/dykes, re-routed drainage
__ Closed mud system
__ Off-site disposal of solids/liquids (in approved facility)
__ Other: _____

Comments: 1300' surface casing well ensure shallow ground water aquifers are isolated. Adequate surface casing and BOP equipment to prevent problems.

Soils/Vegetation/Land Use

(possible concerns)
Steam crossings: None anticipated.
High erosion potential: No, a small cut, up to 3.4' and small fill, up to 2.4', required.
Loss of soil productivity: None, location to be restored after drilling well, if nonproductive. If productive unused portion of drillsite will be reclaimed.
Unusually large wellsite: No, small well site 200'X200'
Damage to improvements: Slight, surface use is a cultivated field.
Conflict with existing land use/values: Slight

Mitigation
__ Avoid improvements (topographic tolerance)
__ Exception location requested
X Stockpile topsoil
__ Stream Crossing Permit (other agency review)
X Reclaim unused part of wellsite if productive
__ Special construction methods to enhance reclamation
__ Other _____

Comments: Existing access off county road. A short access from the existing county road into location will be constructed. Cuttings will be mixed buried in the lined reserve pit. Drilling fluids will be recycled to the next location. Completion fluids will be hauled to a approved commercial saltwater disposal. Reserve pit will be allowed to dry and mixed buried with subsoil . The subsoil clays will be used to solidify the drill cuttings and fill the reserve pit.

Health Hazards/Noise

(possible concerns)
Proximity to public facilities/residences: Closest residence is about 1/8 of a mile to the east from this location..
Possibility of H2S: Yes, possible H2S.
Size of rig/length of drilling time: Double derrick drilling rig 20 to 30 days drilling time.

Mitigation:
X Proper BOP equipment
__ Topographic sound barriers
__ H2S contingency and/or evacuation plan
__ Special equipment/procedures requirements
__ Other:_____
Comments: Adequate surface casing cemented to surface with working BOP stack should mitigate any problems. H2S safety equipment on rig from the Charles Formation to TD.

Wildlife/recreation

(possible concerns)
Proximity to sensitive wildlife areas (DFWP identified): None identified.
Proximity to recreation sites: None identified._____
Creation of new access to wildlife habitat: No
Conflict with game range/refuge management: No
Threatened or endangered Species: Only threatened and endangered species listed are the Pallid Sturgeon, Interior Least Tern, Piping Plover and Whooping Crane. Species listed as "Species of Concern" is the Sprague's Pipit. NH tracker website lists no species of concern in this Township and Range.

Mitigation:
__ Avoidance (topographic tolerance/exception)
__ Other agency review (DFWP, federal agencies, DSL)
__ Screening/fencing of pits, drillsite
__ Other: _____

Comments: No concerns. Private cultivated surface lands, with no live water nearby.

Historical/Cultural/Paleontological

(possible concerns)

Proximity to known sites: None identified.

Mitigation

__ avoidance (topographic tolerance, location exception)

__ other agency review (SHPO, DSL, federal agencies)

__ Other:

Comments: Private cultivated surface lands. No concerns.

Social/Economic

(possible concerns)

__ Substantial effect on tax base

__ Create demand for new governmental services

__ Population increase or relocation

Comments: No concerns.

Remarks or Special Concerns for this site

Red River Formation test 9000' TD.

Summary: Evaluation of Impacts and Cumulative effects

No long term impact expected with the drilling of this well, some short term impacts are expected.

I conclude that the approval of the subject Notice of Intent to Drill (does/**does not**) constitute a major action of state government significantly affecting the quality of the human environment, and (does/**does not**) require the preparation of an environmental impact statement.

Prepared by (BOGC): /s/Steven Sasaki
(title:) Chief Field Inspector
Date: April 18, 2011

Other Persons Contacted:

Montana Bureau of Mines and Geology, Groundwater Information Center website
(Name and Agency)
Roosevelt County water wells
(subject discussed)
April 18, 2011

(date)

US Fish and Wildlife, Region 6 website
(Name and Agency)
ENDANGERED, THREATENED, PROPOSED AND CANDIDATE SPECIES MONTANA COUNTIES, Roosevelt County
(subject discussed)

April 18, 2011
(date)

Montana Natural Heritage Program Website (FWP)
(Name and Agency)
Heritage State Rank= S1, S2, S3, T29N R50E
(subject discussed)

April 18, 2011
(date)

If location was inspected before permit approval:
Inspection date: _____
Inspector: _____
Others present during inspection: _____